

REMARKS

Claims 1 and 7 have been canceled. Claims 2-6 have been amended. Claims 8-12 have been added. No new matter has been provided.

Amended **claim 2** includes the subject matter of cancelled claim 1, and is supported on page 8, lines 4-9. As described on page 8, lines 9-11 (and illustrated by Fig. 1), “[t]his method eliminates the step to incorporate the rotary bearing 22 in the body of rotation 3, which simplifies manufacturing steps.”

Amended **claim 3** includes the subject matter of cancelled claim 1. As described on page 12, lines 3-8, as well as illustrated by Fig. 2, “[t]he polygon mirror 4 is glued directly on the body of rotations 3, with its central opening 42 being fitted externally with the cylindrical section 31 of the body of rotation 3, and with its one end face 4a being brought into contact with the reference plane 32a on the upper surface of the protruded portion 32c of the flange section 32.”

Amended **claim 4** is supported on page 18, line 19 through page 20, line 9 as well as Figs. 5(a) and 5(b). The words “cutout” and “irregularity” have been amended to “slit” and “recessed stripe,” respectively, to recite the claim in more intelligible words, and some other expressions have been added to more clearly recite the invention. No new matter has been included in claim 4.

Amended **claims 5 and 6** have been changed in their dependency to claim 2.

New **claim 8** is supported on page 11, lines 9-16. As described on page 11, lines 16-19, “[d]ue to this, a strain of the cylindrical section 31 caused by fitting between the rotary bearing 24 and the cylindrical section 31 of the body of rotation 3 is prevented from having an influence on the flange section 32.”

New **claims 9 and 11** correspond in subject matter to amended claim 5.

Similarly, new **claims 10 and 12** correspond in subject matter to amended claim 6.

Claim Rejections — 35 USC § 102

(1) As pointed out by the Examiner, Kunii discloses, “the rotor of the motor has no yoke but that it is composed solely of the rotor magnet. A plastic magnet of small specific gravity is used as the rotor magnet. The elimination of the rotor of the rotor yoke offers another

advantage in that the number of parts or components is sufficiently reduced to simplify the overall construction of the optical deflector.”

However, Kunii does **not** disclose the feature of amended **claim 2** wherein “the rotary body is made of plastic magnet which is integrally fixed on the bearing by an injection molding process. Therefore, Kunii does **not** indicate the advantage of amended claim 2, as explained above.

(2) Kunii discloses in col. 5, lines 12-15 that “[t]he polygonal mirror 11, the rotating shaft 20 and the rotor magnet 40 are formed in an integral assembly by being secured with an adhesive 97 filled with in a V groove on the rotating shaft 20.” In other words, in the optical deflector of Kunii, the entire rotor including the polygonal mirror 11 is fixed by adhering the rotor 40 to the rotating shaft 20 with the adhesive 97.

In contrast, in **claim 3**, the polygon mirror 4, the rotor 3 and the bearing 24 are integrally fixed through bonding the polygon mirror 4 with the rotor 3 using an adhesive, as explained above. Therefore, the structure of the entire rotor recited in **claim 3** is different from that of the entire rotor in Kunii. Accordingly, Kunii does **not** disclose the feature recited in **claim 3** of the present invention, wherein the rotary body is fixed on the bearing by either one of force-fitting, shrinkage fitting and adhesion.

(3) Kunii discloses in lines 9-15 of the Abstract that “the rotor magnet is held in close contact with a plane of the polygonal mirror which is perpendicular to the rotating center axis thereof. Even if the optical deflecting element such as a polygonal mirror is rotated at high speed, the runout of the rotor of the motor is suppressed to a minimum without causing a deviation of the scanning light beam”.

However, Kunii does **not** disclose the feature recited in **new claim 8** of the present invention, wherein the rotary body has a cylindrical section that is fitted externally with the bearing and a groove provided around the cylindrical section to be concentric with the cylindrical section. Thus, Kunii does **not** indicate the advantage of new claim 8, as explained above.

Claim Rejections — 35 USC § 103

Claims 5-6 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kunii

in view of Kuwayama et al.

As mentioned above, independent claims 2 and 3 are patentably allowable over Kunii. Kuwayama et al. do not cure the deficiencies of Kunii. Accordingly, claims 2 and 3 are patentably allowable over the cited combination. **Claims 5-6** and **claims 9-10** dependent from claims 2 and 3, respectively, and are therefore patentably allowable for at least the same reason.

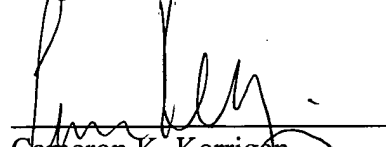
Similarly, Kunii or the combination of Kunii with Kuwayama et al. does not disclose the features of new independent claim 8. Thus, claims 11 and 12 depending therefrom are not disclosed by the combination of Kunii and Kuwayama et al.

In view of the foregoing, independent claims 2, 3 and 8, and all of the claims which respectively depend therefrom, are patentably distinguish over Kunii and Kuwayama et al., taken alone or in combination, under 35 U.S.C. §102 as well as 35 U.S.C. §103. Withdrawal of the rejection and allowance of the claims is respectfully requested.

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